KEVIN BOR-KAE HWANG

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OBJECTIVE

A software engineer with Database, Full-Stack development, and general programming skills looking for full-time position, graduating April 2018

EDUCATION

University of Michigan Sep. 2016-Present

MS in Electrical and Computer Engineering (Signal Processing and Machine Learning) (GPA: 3.8) Ann Arbor, MI

- Expected Graduation: April 2018
- Courses: Operating Systems, Database, Machine Learning, Self-Driving Car, Big Data Systems, Matrix Methods, Probability

National Tsing Hua University Sep. 2011-Jun. 2015

BS in Electrical Engineering (Signal Processing) (GPA: 4.05/4.3, overall class ranking: 1/56) Hsinchu, Taiwan

- Won the Academic Achievement Award (top 3 students in fall 2012)
- Courses: Digital Signal Processing, Operating Systems, Data Structures, Computer Architecture, Signals and Systems

WORK EXPERIENCE

University of Michigan Transportation Research Institute Sep. 2017-Present

Programmer, CMISST Research Group Ann Arbor, MI

- Developing a Michigan crash data visualization tool in D3.js
- Maintaining front-end JavaScript and a CodeIgniter PHP web server

Clinc, Inc. May. 2017-Aug. 2017

Software Engineer, Finie for the Family back-end team Ann Arbor, MI

- Designed and developed a monthly budget tracking feature for conversational AI assistant, allowing the user to manage their budget through voice commands
- Implemented a family assistant for managing budgets, shopping lists, and notifications using natural language processing
- Used Python for back-end logic computation; utilized Django framework to interact with MySQL database
- Developed a web-based chatbot interface with HTML, CSS, JS

PROJECTS

Front-End Web Design: Starkque Feb. 2017-Present

- Developing a web-app where users can login, play games, post photos, and send messages; written with HTML, CSS, JS
- Implemented responsive web design for all size of device screens with Bootstrap
- Established back-end support with MySQL and PHP

Multi-class AdaBoost Algorithm Comparison Nov. 2016-Dec. 2016

- Programmed 3 different versions of the AdaBoost algorithm (M1, M2, SAMME) with Matlab
- Built a decision tree as weak learner for AdaBoost algorithms
- Investigated the pros and cons of AdaBoost algorithms; M2 is accurate for small dataset with few classes, SAMME is fast with large dataset

2D Indoor Positioning System in an Android Game App Jan. 2014-Jan. 2015

- Developed an Android game app, demonstrate a player's movement in real-time, with 1s latency
- Implemented RSSI and INS as distance measurements, achieving a 20% accuracy improvement with a Kalman filter
- Awarded research funding for honorable recognition from National Science Council (NSC) in Taiwan

Augmented Reality Implementation Dec. 2014-Jan. 2015

- Implemented coordinate transformation from real world to virtual world using OpenCV
- Used a webcam to capture images and projected a moving 3D virtual character on those images

SKILLS

Languages: Python, Ruby, Java, C/C++
Databases: SQL, Oracle SQL*Plus, MySQL
Web: HTML, CSS, JavaScript (jQuery, D3.js), Bootstrap, PHP (CodeIgniter)
Tools: Git, MATLAB

LEADERSHIP

Prime Organizer, Graduate Student Association Activity Department Nov. 2014-Jun. 2015

- Coordinated an Escape Room event; attracted over 200 participants and generated over $1000 in revenue

President, NTHU HSNU&ZS Alumni Association Aug. 2012-Aug. 2013

- Elected as president by over 100 members and organized 12 activities annually aiming to enhance connections among over 200 alumni
- Organized 3 large events: summer camp, university expo, Christmas carnival, over 200 participants in each event